

Remarks

The Office Action mailed April 20, 2005 has been carefully reviewed and the foregoing amendment has been made in consequence thereof.

Claims 1-18 and 20-29 are now pending in this application, of which claims 1, 5, 9, 12 and 22 have been amended. It is respectfully submitted that the pending claims define allowable subject matter.

The rejection of claims 1, 2, 4-6, 8, 9, 11, and 29 under 35 U.S.C. § 102(e) as being anticipated by Douglass et al. (U.S. Patent No. 6,566,996) is respectfully traversed.

Applicants acknowledge that Douglass et al., while describing an indicator for a rectangular fuse module, state that the "fuse indicator may be used in other fuses types, such as cartridge fuses, and the like." *See* Douglass et al. col. 2, lines 25-27. Applicants further note, however, that the present application, in paragraphs [0004] and [0005] note that implementing the Douglass et al. indicator in other types of fuses presents a number of issues, and it is respectfully submitted that the Douglass et al. disclosure neither recognizes nor resolves such issues. Contrary to the assertion otherwise in the Final Office Action, Douglass et al. nowhere describes or teaches the indicator of the present claims.

As explained by the Federal Circuit, the requirements of Section 102, which is generally referred to as "anticipation", requires a disclosure in a single piece of prior art of each and every limitation of a claimed invention. Apple Computer, Inc. v. Articulate Systems, Inc., 57 USPQ2d 1057, 1061 (Fed. Cir. 2000). A finding of anticipation requires that the publication describe all of the elements of the claims arranged as in the patented device. C.R. Bard, Inc. v. M3 Systems, Inc., 48 USPQ2d 1225, 1320 (Fed. Cir. 1998).

Claim 1 has been amended for clearly and now recites, among other recitations, a curved backing layer adjacent said secondary fuse link and complementary to the curvature of the extension member.

The assertion that Douglass et al. teach a curved backing layer (56) is respectfully traversed. Douglass et al. nowhere teach that the layer (56) is curved or illustrate that the layer (56) is curved in any of the figures. The Final Office Action states that the layer (56) “would be curved when adapted to function with a cylindrical fuse body.” In response, Applicants note that Douglass et al. nowhere describe an indicator “adapted to function” with a cylindrical body, and nowhere describes, states, or suggests that the indicator, to be used with a cylindrical fuse body, would require a curved backing layer. Douglass et al. nowhere describes or suggests that any modification of the described indicator would be necessary so that it “could be used” on other types of fuses. Rather, the Final Office Action appears to bootstrap a statement in Douglass et al. that the indicator “could be used” with other fuse types with an assumption, nowhere expressed by Douglass et al., that using the indicator with other types of fuses “would have required” a curved backing layer. The analysis appears to be more akin to an obviousness rejection than an anticipation rejection, as nowhere “does” Douglass et al. actually describe a curved base layer in its indicator construction. Douglass is simply silent regarding any potential modification of the indicator for use with other types of fuses, and the described construction of the indicator does not meet the language of claim 1.

Thus, as independent claim 1 clearly recites a curved backing layer, that is nowhere found in the disclosure of the Douglass et al. reference, claim 1 is submitted to be patentable over Douglass et al.

Claims 2, 4-6, 8, 9, and 11 depend from claim 1, and when the recitations of claims 2, 4-6, 8, 9, and 11 are considered in combination with the recitations of claim 1, claims 2, 4-6, 8, 9, and 11 are likewise submitted to be patentable over the cited art.

Moreover, claim 5 has been amended for clarity, and Douglass et al. do not describe an extension member that is elongated in a longitudinal direction and curved in a lateral direction to maintain contact with an inner surface of a cylindrical fuse body as claim 5 recites.

Claim 9 has been amended for clarity and now recites that the extension member is curved, and that the backing layer is flexible, thereby accommodating a curvature of said extension member when attached thereto. The Final Office Action states that Douglass et al. teaches a backing layer made from plastic, and that plastic is known to be flexible. Nothing in the description of Douglass et al., however, describes or suggests that the plastic is, indeed flexible, and nowhere describes or suggests that it could accommodate a curvature of the extension member when attached thereto.

With respect to claim 29, the Final Office Actions states that plastic is inherently flexible and the that Douglass et al. therefore teach the recited flexible backing layer. Applicants note, however, that not all plastics are fairly characterized as “flexible” and, in fact, many plastics are quite rigid. Douglass et al. nowhere describe that the layer (56) is flexible, and do not directly suggest it either, although Douglass et al. does state that the layer (56) includes cutout corners for snap fit engagement with the extension member. It is believed to be apparent, however, that the snap fit engagement is provided by flexing of the retaining arms (58) of the Douglass et al. extension member, and not by virtue of any material characteristic of the layer (56). It is submitted that the Douglass et al. layer (56) would need to be relatively rigid to obtain the snap fit engagement described in the Douglass et al. reference.

The indicator of claim 29, including the flexible backing layer, is therefore respectfully submitted to be neither described nor suggested by Douglass et al., and claim 29 is respectfully submitted to be patentable over the same.

For the reasons set forth above, Applicants respectfully request that the Section 102 rejection of claims 1, 2, 4-6, 8, 9, 11, and 29 be withdrawn.

The rejection of claims 1, 5, 6, 8-12, 15 -18, 20, 22, and 25-29 under 35 U.S.C. § 103(a) as being unpatentable over Ogle (U.S. Patent No. 809,978) in view of Darr et al. (U.S. Patent No. 6,373,370) and Borchart (U.S. Patent No. 4,127,837) is respectfully traversed.

The Final Office Action states that Ogle is relied upon to show the conventionality of cylindrical fuses with built in indicators, but concedes that Ogle does not disclose a transparent lens, an extension member, a backing layer, or a readily combustible substance. Applicants further note that the Ogle indicator is located exterior to the body of the Ogle et al. fuse.

Darr et al. describe a combustible fuse state indicator including a conductive indicating layer which vaporizes to reveal a backing layer when a secondary fuse link opens. The conductive layer is a sputtered metal, and as such is neither fairly characterized as combustible or ignitable. Darr is cited for teaching a backing layer (46) having curves along the edges thereof, but the rounded corners of the backing layer (46) are not complementary to the curvature of the extension member as claim 1 now recites. Darr et al., like Douglass et al., state that the indicator could be used in other types of fuses besides rectangular fuse modules, but nowhere disclose or suggest that this would entail a curved backing layer as recited in claim 1. Darr et al., like Douglass et al., is silent regarding any modification of the described indicator to be used with other types of fuses, and Darr et al. does not describe a curved backing layer complementary to a curvature of an extension member

Borchart is relied upon for its teaching of a combustible substance. Borchart, however, like Ogle and Darr et al., nowhere describe a curved backing layer complementary to a curvature of an extension member. In fact, the Borchart indicator does not include an extension member at all, but rather discloses a conductor loop (4) extending between supply wires (3) without any supporting structure. Further, while Figure 2 of Borchart appears to disclose a curved surface of a base member (5), the curvature of the base surface is not complementary to any other component in the indicator or the fuse.

It is therefore respectfully submitted that Ogle, Darr et al., and Borchart, considered in combination, collectively fail to teach the fuse state indicator of claim 1. Ogle and Borchart fail to disclose extension members at all, and while Darr et al. do disclose an extension member, the extension member and backing layer are not curved in a complementary manner.

Claim 1 is therefore submitted to be patentable over Ogle in view of Darr et al., and further in view of Borchart.

Claims 5, 6, and 8-11 depend from claim 1, and when the recitations of claims 5, 6, and 8-11 are considered in combination with the recitations of claim 1, claims 5, 6, and 8-11 are likewise submitted to be patentable over the cited art.

Claim 12 recites, among other recitations, a flexible backing layer accommodating a curvature of the tubular fuse body. For the reasons set forth above, this is nowhere found in the cited art. Ogle does not describe a backing layer. Darr et al. describe a flat backing layer that is nowhere described as being flexible, and the shape of the backing layer of Darr et al. cannot accommodate a curvature of a tubular fuse body. Borchart discloses a base member (2) having a curved surface, but the curved surface is not complementary to a curvature of the hood (5) of the fuse. Thus, the references collectively fail to teach at least this recitation of claim 12, and the invention of claim 12 is therefore not obvious over the cited art.

Claim 12 is therefore submitted to be patentable over the cited art.

Claims 15-18 and 20 depend from claim 12, and when the recitations of claims 15-18 and 20 are considered in combination with the recitations of claim 12, claims 15-18 and 20 are likewise submitted to be patentable over the cited art.

Claim 22 recites, among other recitations, an extension member having a curvature complementary to the tubular body. The cited art does not teach or suggest this feature. Ogle and Borchart do not describe extension members. Darr et al. describe a flat extension member.

Thus, the references collectively fail to teach at least this recitation of claim 22, and the invention of claim 12, considering all of its recitations, is therefore not obvious over the cited art.

Claim 22 is therefore submitted to be patentable over the cited art.

Claims 25-28 depend from claim 22, and when the recitations of claims 25-28 are considered in combination with the recitations of claim 22, claims 25-28 are likewise submitted to be patentable over the cited art.

With respect to claims 10, 18 and 27 and the recited electrical tape, Applicants note that nothing in the cited art indicates that electrical tape has been used in a manner consistent with the claims, and absent some demonstration of this in the prior art, the claims are patentable.

With respect to claim 29, the Final Office Actions concedes that Ogle does not describe a flexible backing layer. Applicants submit that the base of Borchart is not described as being flexible either. Darr et al. is cited for teaching a flexible backing layer. Applicants submit, however, that nothing in the Darr et al. description fairly suggest this.

Darr et al. states that its backing layer may be fabricated from materials known in the art, which the Final Office Action states can be flexible. Darr et al. nowhere describe, however, that the layer (46) is flexible, and do not directly suggest it either, although Douglass et al. do state that longitudinal sides (76) of the layer (46) snap fit into retaining projections (78) of the extension member. It is believed to be apparent, however, that the snap fit engagement is provided by flexing of the retaining arms (78) of the Darr et al. extension member, and not by virtue of any material characteristic of the layer (46). It is submitted that the Darr et al. layer (46) would need to be relatively rigid to obtain the snap fit engagement described in the Douglass et al. reference.

The indicator of claim 29, including the flexible backing layer, is therefore respectfully submitted to be neither described nor suggested by the cited art, and claim 29 is respectfully submitted to be patentable over the same.

For the reasons set forth above, Applicants respectfully request that the Section 103 rejections of claim 1 , 5, 6, 8-12, 15 -18, 20, 22, and 25-29 be withdrawn.

The rejection of Claims 2-4, 13, 14, 23 and 24 under 35 U.S.C. § 103(a) as being unpatentable over Ogle in view of Darr et al. and Borchart, and further in view of Sachs (U.S. Patent No. 737,280) is respectfully traversed.

Sachs describes a fuse having an indicator wire passing through the outer case or body of the fuse, and a portion of the indicator wire extends upon the surface of the case. A label is placed over the indicator wire, and the indicator wire burns the label to provide visual indication of an operated fuse. The Sachs fuse does not include a backing layer, and adds nothing to the teaching of Ogle, Darr et al. and Borchart with respect to the invention of claims 1, 12, and 22 and the deficiencies described above. Ogle in view of Darr et al. and Borchart, and further in view of Sachs, are not suggestive of claims 1, 12 and 22, and accordingly claims 1, 12, and 22 are submitted to be patentable over Ogle in view of Darr et al. and Borchart, and further in view of Sachs.

Claims 2-4, 13, 14, 23 and 24 are dependent claims of independent claims 1, 12, and 22, and when considered in combination with their respective base claims, claims 2-4, 13, 14, 23 and 24 are likewise submitted to be patentable over Ogle in view of Darr.

For the reasons set forth above, Applicants respectfully request that the Section 103 rejection of Claims 2-4, 13, 14, 23 and 24 be withdrawn.

The rejection of Claims 7 and 21 under 35 U.S.C. § 103(a) as being unpatentable over Ogle in view of Darr et al. and Borchart, and further in view of Oh (U.S. Patent No. 5,418,516) is respectfully traversed.

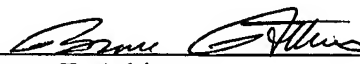
Claims 7 and 21 depend from independent claims 1 and 12, respectively, which are submitted to be patentable over Ogle in view of Darr et al and Borchart. for the reasons set forth above. Oh adds nothing to the teaching of Ogle and Darr et al. and Borchart with respect to the inventions of claims 1 and 12. Oh does not describe an indicating fuse, and does not describe an extension member or backing layer as recited in the claims at issue.

Claims 1 and 12 are therefore submitted to be patentable over Ogle in view of Darr et al. and further in view of Borchart and Oh, and when the recitations of claims 7 and 21 are considered in combination with the recitations of claims 1 and 12, claims 7 and 21 are likewise submitted to be patentable over Ogle in view of Darr et al. and further in view of Oh.

For the reasons set forth above, Applicants respectfully request that the Section 103 rejection of Claims 7 and 21 be withdrawn.

In view of the foregoing amendments and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully Submitted,


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